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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO |
|-----------------|------------------|----------------------|---------------------|-----------------|
| 10/660,462 | 09/11/2003 | Keith G. Lurie | 016354-005211US | 4944 |
| 20350 | 7590 11/30/200 | 4 | EXAM | IINER |
| TOWNSEN | D AND TOWNSE | RAGONESE, | RAGONESE, ANDREA M | |
| TWO EMBA | RCADERO CENTEI | | | |
| EIGHTH FLO | EIGHTH FLOOR | | ART UNIT | PAPER NUMBER |
| SAN FRANC | TISCO CA 94111-3 | 834 | 3743 | |

DATE MAILED: 11/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | Application No. | Applicant(s) | | | | |
|---|---|--|--|--|--|--|
| | 10/660,462 | LURIE, KEITH G. | | | | |
| Office Action Summary | Examiner | Art Unit | | | | |
| | Andrea M. Ragonese | 3743 | | | | |
| The MAILING DATE of this communication app Period for Reply | ears on the cover sheet with the c | orrespondence address | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | 36(a). In no event, however, may a reply be time within the statutory minimum of thirty (30) days will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE | nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133). | | | | |
| Status | | | | | | |
| 1) Responsive to communication(s) filed on 11 Se | eptember 2003. | | | | | |
| 2a) ☐ This action is FINAL . 2b) ☒ This | This action is FINAL . 2b)⊠ This action is non-final. | | | | | |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. | | | | | | |
| Disposition of Claims | | | | | | |
| 4) Claim(s) 1-24 is/are pending in the application. 4a) Of the above claim(s) is/are withdray 5) Claim(s) is/are allowed. 6) Claim(s) 1-24 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or | vn from consideration. | | | | | |
| Application Papers | | | | | | |
| 9)☐ The specification is objected to by the Examiner. | | | | | | |
| 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. | | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | | |
| Priority under 35 U.S.C. § 119 | | | | | | |
| 12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the priori | s have been received. s have been received in Application ity documents have been received (PCT Rule 17.2(a)). | on No ed in this National Stage | | | | |
| * See the attached detailed Office action for a list of | or the certified copies not receive | a. | | | | |
| Attachment(s) | _ | | | | | |
| Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date | 4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal Pa | | | | | |

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DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 1-3, 9, 14-15 and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Biondi et al. (US 5,377,671). Biondi et al. discloses a method for treating a person "with compromised respiratory function," such as suffering from head trauma associated with elevated intracranial pressures (column 1, lines 16-19) by:
 - coupling a mechanical ventilator to a person, as shown in Figure 1;
 - actively delivering a positive pressure breath to a person using the ventilator (column 3, lines 10-31);
 - actively extracting respiratory gases from the person's airway following the
 positive pressure breath using the mechanical ventilator to create an
 intrathoracic vacuum to lower pressures in the venous blood vessels that
 transport blood out of the head, which inherently reduces intracranial
 pressures (Abstract); and
 - repeating the steps of delivering a positive pressure breaths and extracting respiratory gases.

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Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:
 - 1. Determining the scope and contents of the prior art.
 - 2. Ascertaining the differences between the prior art and the claims at issue.
 - 3. Resolving the level of ordinary skill in the pertinent art.
 - 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
- 5. Claims 4-8, 10-13, 16-20 and 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Biondi et al. (US 5,377,671), as applied to claims 1 and 14 above. Biondi et al. teaches a method comprising all limitations recited in claims 4-8, 10-13, 16-20 and 22-24, but does not expressly disclose the ranges of different system parameters, such as breath delivery time and rate, vacuum pressure and intrathoracic pressure levels. At the time of the invention was made, it would have been obvious to one having ordinary skill in the art to optimize the most effective variables of this method to achieve optimal results, such as reducing intracranial pressures. Therefore, it would have been obvious to modify the method of Biondi et al. by utilizing the specific ranges of breath delivery time and rate, vacuum pressure and intrathoracic pressure levels because it is well known in the art to provide different parameters of breath delivery time

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and rate, vacuum pressure and intrathoracic pressure based on a specific patient's needs by "timing the respiratory gas introduction and extraction portions of the ventilatory cycle so as to be synchronous with portions of the cardiac cycle" in order to accomplish "reducing intrathoracic pressure of the patient" (column 2, lines 12-34). See In re Boesch and Slaney, 205 USPQ 215 (CCPA 1980).

Conclusion

- 6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Andrea M. Ragonese** whose telephone number is **571-272-4804**. The examiner can normally be reached on Monday through Thursday from 8:30 am until 4:30 pm.
- 7. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Henry A. Bennett can be reached on 571-272-4791. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.
- 8. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

November 29, 2004

Hein Bernnett
Supervisor Patent Examiner
Appup 3700